

REMARKS

Further and favorable reconsideration is respectfully requested in view of the foregoing amendments and following remarks.

Information Disclosure Statement

Initially, Applicants filed an Information Disclosure Statement on July 31, 2007, (prior to the mail date of the current office action), which has not yet been considered by the Examiner. Accordingly, the Examiner is respectfully requested to consider the references cited therein and return an Examiner-initialed PTO-1449 Form to Applicants' representative with the next correspondence.

Claim Amendments

Claim 1 has been amended to recite that the catalyst consists essentially of metal particles of Ag and/ or Au supported on a carrier. Claim 2 has been written in independent form, (due to the amendment of claim 1), and recites that the catalyst consists essentially of metal particles of Ag and/ or Au, and one or more group VIII elements supported on a carrier. Claim 7 has been amended to be consistent with amended claim 2. No new matter has been added to the application by these amendments.

Patentability Arguments

The patentability of the present invention over the disclosure of the reference relied upon by the Examiner in rejecting the claims will be apparent upon consideration of the following remarks.

Rejection Under 35 U.S.C. § 103(a)

The rejection of claims 1-9 under 35 U.S.C. § 103(a) as being unpatentable over Ishii et al. (U.S. 5,958,821) is respectfully traversed.

Ishii et al. disclose a method for oxidizing an aromatic compound having a methyl or methylene group by oxidizing with oxygen in the presence of an oxidation catalyst

comprising an imide compound with a specific structure and a co-catalyst containing an element selected from the group consisting of Group 2A elements of the Periodic Table of Elements, transition metals (including Group 8 elements and Group 1B elements, such as Au and/or Ag, of the Periodic Table of Elements), and Group 3B elements of the Periodic Table of Elements, to give an aldehyde, ketone, alcohol, carboxylic acid, or the like.

Some of the following comments were essentially set forth in the Amendment filed May 24, 2007. The comments are restated below for the Examiner's convenience, and in light of the new claim amendments.

The oxidation catalytic system of Ishii et al. comprises a specific imide compound as an essential component. Thus, the co-catalyst used in the method of Ishii et al. is different from a catalyst consisting essentially of metal particles of Au and/or Ag supported on a carrier, as required by amended, independent claim 1.

Further, Ishii et al. fail to teach or suggest a catalyst consisting essentially of metal particles of Ag and/or Au, and one or more group VIII elements supported on a carrier, as recited in independent claim 2. The reference further fails to teach or suggest a catalyst consisting essentially of metal particles of Ag and/or Au and metal particles of one or more group VIII elements separately supported on a carrier, or metal particles of an alloy or an intermetallic compound of Ag and/or Au and one or more group VIII elements supported on a carrier, as required by amended claim 7.

In short, Ishii et al. fail to teach or suggest a method for oxidation of an aromatic compound having an alkyl substituent, by oxidizing the aromatic compound having an alkyl substituent with an oxygen molecule in the presence of a catalyst consisting essentially of metal particles of Ag and/or Au supported on a carrier, as required by amended claim 1.

Further, Ishii et al. fail to teach or suggest a method for producing an aromatic aldehyde by the same method, as required by claim 3. Additionally, Ishii et al. fail to teach or suggest producing an aromatic carboxylic acid ester comprising reacting the above aromatic aldehyde with a primary alcohol, as required by claim 4.

In response to Applicants' previous arguments, the Examiner states that Ishii et al. teach the oxidation of an aromatic compound having an alkyl substituent to produce an aromatic carboxylic ester by the addition of a primary alcohol. However, Ishii et al. fail to teach Applicants' claimed method, because, as stated above, Ishii et al. fail to teach or suggest Applicants' recited catalyst.

Furthermore, the methods of claims 1 to 9 result in unexpected advantageous effects. Specifically, an aromatic aldehyde compound can be obtained in a high yield with high selectivity by oxidizing an aromatic compound having an alkyl substituent with oxygen molecule in the presence of a catalyst consisting essentially of metal particles of Au and/or Ag supported on a carrier; and an aromatic compound having an alkyl substituent can be converted into an aromatic carboxylic acid ester in a direct, simple, and easy manner by allowing a primary alcohol to exist as a reaction solvent during the above oxidation reaction.

Ishii et al. fail to teach or suggest the above-discussed advantages.

For these reasons, the invention of claims 1-9 is clearly patentable over Ishii et al.

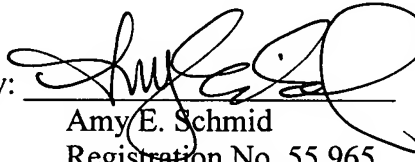
Conclusion

Therefore, in view of the foregoing amendments and remarks, it is submitted that the ground of rejection set forth by the Examiner has been overcome, and that the application is in condition for allowance. Such allowance is solicited.

If, after reviewing this Amendment, the Examiner feels there are any issues remaining which must be resolved before the application can be passed to issue, the Examiner is respectfully requested to contact the undersigned by telephone in order to resolve such issues.

Respectfully submitted,

Toshio HAYASHI

By: 
Amy E. Schmid
Registration No. 55,965
Attorney for Applicant

AES/nrj
Washington, D.C. 20006-1021
Telephone (202) 721-8200
Facsimile (202) 721-8250
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